

## **ABSTRACT**

The present invention provides a gastro-retentive diagnostic assembly (GRDA) for use in determining a condition of a subject's gastrointestinal tract (GI tract), comprising a folded single or multi-layered device comprising a diagnostic utility, such as a contrasting agent, the device prior to folding being essentially planar, and included in a delivery system for oral intake, the delivery system being adapted to release the device once in the stomach, whereupon release said device unfolds into an unfolded shape that results in the retention of the device in the stomach. Further provided are methods of determining a condition of a subject's GI tract by the use of the GRDA of the invention, as well as uses of a single or multi-layered device comprising a diagnostic utility when in a folded or unfolded shape, and method of preparing the GRDA of the invention.